

ABSTRACT

Spectrometer instruments are characterized by classifying their spectra into
5 previously defined clusters. The spectra are mapped to the clusters and a
classification is made based on similarity of extracted spectral features to one of
the previously defined clusters. Calibration models for each cluster are provided
to compensate for instrumental variation. Calibration models are provided either
by transferring a master calibration to slave calibrations or by calculating a
10 separate calibration for each cluster.

A simplified method of calibration transfer maps clusters to each other, so that a
calibration transferred between clusters models only the difference between the
two clusters, substantially reducing the complexity of the model.

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